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Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete If Known

Application Number 10/802,505  
Filing Date March 16, 2004  
First Named Inventor SAFWAT, Sherif  
Group Art Unit 3643  
Examiner Name Darren W. Ark  
Attorney Docket Number 2195CON2

Sheet 1 of 6

## U.S. PATENT DOCUMENTS

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document Number Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figure Aspects
DA		1,026,544	YAMAMOTO	05/14/12	
		1,552,269	BROCKER	09/01/25	
		1,689,119	EVANS	10/23/28	
		1,695,595	LARNED	12/18/28	
		1,897,224	ANDREWS	02/14/33	
		2,162,115	PAULS	06/13/39	
		2,511,057	GUTHRIE, et.al.	06/13/50	
		2,590,586	THOMPSON, Jr., et.al.	03/25/52	
		2,792,617	HALLER	05/21/57	
		2,816,386	HARRIS, et.al.	12/17/57	
		2,823,576	NEEDHAM, et.al.	02/18/58	
		2,999,413	MOMOI	09/12/61	
		3,041,915	RYFFEL	07/03/62	
		3,102,357	LUKETA	09/03/63	
		3,129,632	STARR	04/21/64	
		3,131,501	LUKETA	05/05/64	
		3,153,297	GRABOWSKY	10/20/64	
		3,308,567	LUKETA	03/14/67	
		3,369,317	BROWNELL	02/20/68	
		3,606,815	YAMASHITA, et.al.	09/21/71	

## FOREIGN PATENT DOCUMENTS

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document Office <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figure Aspects	T <sup>6</sup>
DA		DE 3543253 A1	Peroveschikov, et al.	06/1987		
		FR 2521065	Cassart, et al.	08/1983		
		JP 57-13660		03/1982		
		JP 59-71630		04/1984		
		JP 60-30630		02/1985		
		JP 60-39782	Horie	03/1982		
		JP 60-88160		05/1985		
		JP 60-139860		07/1985		
		JP 61-386	Horie	08/1986		

Examiner Signature	<i>Darren W. Ark</i>	Date Considered	9/4/03
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	<b>Application Number</b>	10/802,505		
	<b>Filing Date</b>	March 16, 2004		
	<b>First Named Inventor</b>	SAFWAT, S.		
	<b>Group Art Unit</b>	3643		
	<b>Examiner Name</b>	Darren W. Ark		
	<b>Attorney Docket Number</b>	2195CON2		
<b>Sheet</b>	<b>2</b>	<b>of</b>	<b>6</b>	

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>2</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>3</sup> (if known)			
DA		4,356,654		TREKEL, et. al.	11/02/82	
		4,378,725		HOSPERS, et al.	04/05/83	
		4,457,959		DORNHEIM, et al.	07/03/84	
		4,466,331		MATHESON	08/21/84	
		4,521,986		KOGA	06/11/85	
		4,619,108		HOTTA	10/28/86	
		4,947,727		MOMOI	08/14/90	
		5,339,657		McMURRAY	08/23/94	
		5,453,190		MARTIN, SR.	09/26/95	
		5,622,094		REXROAD	04/22/97	
		5,694,755		FRØYSTAD	12/09/97	
		5,752,459		REXROAD	05/19/98	
		5,860,350		REXROAD	01/19/99	
V		6,374,531	B1	SAFWAY, et al.	04/23/02	

FOREIGN PATENT DOCUMENTS								
Examiner Initials <sup>1</sup>	Cite No. <sup>2</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Office <sup>4</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
DA		RU	524876		Aljoshin, et al.	11/1976		
I		RU	1444981		_____	12/1986		
		RU	1480792	A1	Perevoschikov, et al.	05/1989		
		WO	91/01633		Theret, et al.	02/1991		
		WO	95/06405		Carlsen, et al.	03/1995		
V		WO	97/13407		Safwat, et al.	04/1997		

<b>Examiner Signature</b> <i>Darren W. Ark</i>	<b>Date Considered</b> <i>9/4/04</i>
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			Application Number	10/802,505	
			Filing Date	March 16, 2004	
			First Named Inventor	SAFWAY, Sherif	
			Group Art Unit	3643	
			Examiner Name	Darren W. Ark	
Sheet	3	of	6	Attorney Docket Number	2195CON2

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
DA		Batill, S. M., et al., "An Experimental Investigation of the Flow Field Around Yawed Stranded Cables," Contract No. N00014-83K-0239, Rept. No. CR 2210-89-1, University of Notre Dame, Notre Dame, Indiana (1989)	
		Batill, S. M., et al., "Flow Field Studies on Yawed, Stranded Cables," in Flow Visualization, Reznicek V. R. ed., Hemisphere Publishing Corp., pp.391-396 (1990)	
DA		Batill, S. M., et al., "Detailed Near Surface Flow ABOUT Yawed, Stranded Cables", Contract No. N00014-83K-0239, Rep. No. CSS CR 1210-92-1, University of Notre Dame, Notre Dame, Indiana (1992)	
		Breidenthal, R., Phus. Fluids, Vol. 23, No. 10, p. 1931 (1980)	
DA		Cermak, J.E., "Aerodynamics of Buildings," Annual review of Mechanics 8 p. 99 (1976)	
		Diggs, J. S., "Hydrodynamic Characterization of Various Towed Array Towcables," Tech. Rpt. No. 128, Contract No. N00600-73-D-1077, Mar, Incorporated (1974)	
DA		Endeco, Inc., "Halred Faired Cable," Endeco Towed Systems (date unknown)	

Examiner Signature	Darren W. Ark	Date Considered	9/4/04
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Application Number	10/802,505			
Filing Date	March 16, 2004			
First Named Inventor	SAFWAY, Sherif			
Group Art Unit	3643			
Examiner Name	Darren W. Ark			
Attorney Docket Number	2195CON2			
Sheet	4	of	6	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume- issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
DA		Flugwiss, Z., Weltraumforsch 14, p. 40 (date unknown)	
DA		Garner, J. "How to Make and Set Nets or The Technology of Netting," Fishing News Books Ltd., 1982	
DA		Hoerner, S. F., "Fluid-Dynamic Drag," published by author, pp. 3-2 and 4-4 (1965).	
DA		Hoerner, S. F., "III-Pressure Drag," published by author, pp. 3-7,3-9, 3-11 and 3-27 (1965).	
DA		Hoerner, S. F., "IV-Structures," published by author, p.4-5 (1965).	
DA		Hunt, J. C. R., "Industrial and Environmental Fluid Mechanics," Annual Review of Fluid Mechanics 23, pp. 10-12 (1991).	
DA		Klust, G., "Netting Materials for Fishing Gear", Fishing News Books Ltd., 1973	
DA		"Knuckleballs," Scientific American, p. 22 (1987)	
DA		Lisoski graph, Fig. 7, Experimental Lift and Drag Histories for Bluff Plate, p. 95 (1993).	
DA		Mehta, R. D., "Aerodynamics of Sports Balls," Ann. Rev. Fluid Mech. 17:151-189 (1985).	
DA		Nebres, J. V., "Flow Around Yawed Stranded Cables," Master's Thesis, University of Notre Dame, Notre Dame, Indiana (1989).	

Examiner Signature	<i>Darren W. Ark</i>	Date Considered	9/4/04
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			First Named Inventor	SAFWAY, Sherif	
			Group Art Unit	3643	
			Examiner Name	Darren W. Ark	
Sheet	5	of	6	Attorney Docket Number	2195CON2

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	?
DA		Nebres, J. V., "Wake Similarity and Vortex Formation for Two-Dimensional Bluff Bodies," Doctoral Dissertation, University of Notre Dame, Notre Dame, Indiana (1992)	
DA		Oceanographic Ribbon Fairing Cable, The Rochester Corporation, Cat-82 (date unknown)	
DA		Roshko, A., "Perspectives on Bluff Body Aerodynamics," Second International Colloquium on Bluff Body Aerodynamics and Application, Melbourne, 7-10, pp. 81 (1992)	
DA		"On the Persistence of Transition in the Near-Wake," pp. 607 and 609. Problems of Hydrodynamics and Continuum Mechanics, Soc. Industrial and Appl. Math., Philadelphia (1969)	
DA		"Examples of Spectrum products, specific projects and end-users," Spectrum Ocean Systems Limited, Peterborough, Ontario (date unknown)	
DA		"Fairing and Anti-Stacking Ring Assemblies for Tow Cables," Spectrum Ocean Systems Limited, Peterborough, Ontario (date unknown)	
DA		Williamson, C. H. K., "Oblique and Parallel Modes of Vortex Shedding in the Wake of a Circular Cylinder at Low Reynolds Numbers," Journal of Fluid Mechanics 206:595 and 597, 1989	

Examiner Signature	Darren W. Ark	Date Considered	9/4/04
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<b>Group Art Unit</b>	<b>3643</b>
<b>Examiner Name</b>	<b>Darren W. Ark</b>
<b>Attorney Docket Number</b>	<b>2195CON2</b>

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Sheet 6 of 6

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